



SEQUENCE LISTING

<110> Marasco, Wayne
Mhashilkar, Abner

<120> INTRABODY-MEDIATED CONTROL OF IMMUNE REACTIONS

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<140> 09/522,727

<141> 2000-03-10

<150> PCT/US98/19563

<151> 1998-09-18

<150> 60/059,339

<151> 1997-09-18

<160> 55

<170> PatentIn version 3.0

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crkggt 66

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Ser Glu Lys Asp Glu Leu
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Lys Asp Glu Leu
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Asp Asp Glu Leu
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Asp Glu Glu Leu
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Gln Glu Asp Leu
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Arg Asp Glu Leu
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Gln Pro Lys Lys Pro
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Gly Gln Thr Val Thr Thr Pro Leu
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Gly Gln Glu Leu Ser Gln His Glu
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Gly Asn Ser Pro Ser Tyr Asn Pro
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Gly Val Ser Gly Ser Lys Gly Gln
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Gly Gln Thr Ile Thr Thr Pro Leu
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Gly Gln Thr Leu Thr Thr Pro Leu
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Gly Gln Ile Phe Ser Arg Ser Ala
1 5

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Gly Gln Ile His Gly Leu Ser Pro
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Gly Ala Arg Ala Ser Val Leu Ser
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Gly Ala Ala Leu Thr Ile Leu Val
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Gly Ala Ala Leu Thr Leu Leu Gly
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Gly Ala Gln Leu Ser Arg Asn Thr
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Gly Asn Ala Ala Ala Ala Lys Lys
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Gly Asn Glu Ala Ser Tyr Pro Leu
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 gtc ctg tcc cag gtg caa ctg cag cag tca ggg gct gag ctg gca aga 96
 Val Leu Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Ala Arg
 20 25 30
 cct ggg gct tca gtg aag ttg tcc tgc aag gct tct ggc tac acc ttt 144
 Pro Gly Ala Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe
 35 40 45
 act agt cac tgg atg cag tgg gtg aga cag agg cct gga cag ggt ctg 192
 Thr Ser His Trp Met Gln Trp Val Arg Gln Arg Pro Gly Gln Gly Leu
 50 55 60
 gaa tgg att ggg act att tat cct gga gat ggt gat act agg tac act 240
 Glu Trp Ile Gly Thr Ile Tyr Pro Gly Asp Gly Asp Thr Arg Tyr Thr
 65 70 75 80
 cag aat ttc aag ggc aag gcc aca ttg act gca gat aag tcc tcc acc 288
 Gln Asn Phe Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Thr
 85 90 95
 aca gcc tac tta cac ctc agc agc ttg tca tct gaa gac tct gcg gtc 336
 Thr Ala Tyr Leu His Leu Ser Ser Leu Ser Ser Glu Asp Ser Ala Val
 100 105 110
 tat tat tgt gca aga gat gag att act acg gtt gta ccc cgg ggg ttt 384
 Tyr Tyr Cys Ala Arg Asp Glu Ile Thr Thr Val Val Pro Arg Gly Phe
 115 120 125
 gct tac tgg ggc caa ggg acc tcg gtc acc gtc tcc tca ggt ggc ggt 432
 Ala Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly
 130 135 140
 ggc tcg ggc ggt ggt ggc tcg ggt ggc ggc gga tct gag ctc gtg ctc 480
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Leu Val Leu
 145 150 155 160
 acc caa acc cca acc tcc ctg gct ncc tct ctg gga gac aga gtc acc 528

Thr Gln Thr Pro Thr Ser Leu Ala Xaa Ser Leu Gly Asp Arg Val Thr
 165 170 175
 atc agt tgc agg gca agt cag gac att agc agt tat tta aac tgg tat 576
 Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Ser Tyr Leu Asn Trp Tyr
 180 185 190
 cag cag aaa cca gat gga act att aaa ctc ctg atc tac tac aca tca 624
 Gln Gln Lys Pro Asp Gly Thr Ile Lys Leu Leu Ile Tyr Tyr Thr Ser
 195 200 205
 aga tta tat tca gga gtc cca cca agg ttc agt ggc agt ggg gct gga 672
 Arg Leu Tyr Ser Gly Val Pro Pro Arg Phe Ser Gly Ser Gly Ala Gly
 210 215 220
 aca gat tat tct ctc acc atc agc aac ctg gag caa gaa gat ttt gcc 720
 Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln Glu Asp Phe Ala
 225 230 235 240
 act tac ttt tgc caa cag ggt aat gtg att ccg tac acg ttc gga ggg 768
 Thr Tyr Phe Cys Gln Gln Gly Asn Val Ile Pro Tyr Thr Phe Gly Gly
 245 250 255
 ggg acc aag ctg gaa atg aaa cgg gct gat gct gca cca act gta agc 816
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 260 265 270
 gaa aag gac gag ctg taa taa 837
 Glu Lys Asp Glu Leu
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 Pro Gly Ala Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe
 35 40 45
 Thr Ser His Trp Met Gln Trp Val Arg Gln Arg Pro Gly Gln Gly Leu
 50 55 60
 Glu Trp Ile Gly Thr Ile Tyr Pro Gly Asp Gly Asp Thr Arg Tyr Thr
 65 70 75 80

Gln Asn Phe Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Thr
85 90 95

Thr Ala Tyr Leu His Leu Ser Ser Leu Ser Ser Glu Asp Ser Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Asp Glu Ile Thr Thr Val Val Pro Arg Gly Phe
115 120 125

Ala Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Leu Val Leu
145 150 155 160

Thr Gln Thr Pro Thr Ser Leu Ala Xaa Ser Leu Gly Asp Arg Val Thr
165 170 175

Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Ser Tyr Leu Asn Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gly Thr Ile Lys Leu Leu Ile Tyr Tyr Thr Ser
195 200 205

Arg Leu Tyr Ser Gly Val Pro Pro Arg Phe Ser Gly Ser Gly Ala Gly
210 215 220

Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln Glu Asp Phe Ala
225 230 235 240

Thr Tyr Phe Cys Gln Gln Gly Asn Val Ile Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Leu Glu Met Lys Arg Ala Asp Ala Ala Pro Thr Val Ser
260 265 270

Glu Lys Asp Glu Leu
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<220>
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Met Glu His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp

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 gtc ctg tcc cag gtg caa ctg cag cag tct ggg gct gag ctg aca aga 96
 Val Leu Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Thr Arg
 20 25 30
 cct ggg gct tca gtg aag ttg tcc tgc aag gct tct ggc tac acc ttt 144
 Pro Gly Ala Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe
 35 40 45
 act agt cac tgg atg cag tgg gtg aga cag agg cct gga cag ggt ctg 192
 Thr Ser His Trp Met Gln Trp Val Arg Gln Arg Pro Gly Gln Gly Leu
 50 55 60
 gaa tgg att ggg act att tat cct gga gat ggt gat act agg tac act 240
 Glu Trp Ile Gly Thr Ile Tyr Pro Gly Asp Gly Asp Thr Arg Tyr Thr
 65 70 75 80
 cag aat ttc aag ggc aag gcc aca ttg act gca gat aag tcc tcc acc 288
 Gln Asn Phe Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Thr
 85 90 95
 aca gcc tac tta cac ctc agc agc ttg tca tct gaa gac tct gcg gtc 336
 Thr Ala Tyr Leu His Leu Ser Ser Leu Ser Ser Glu Asp Ser Ala Val
 100 105 110
 tat tat tgt gca aga gat gag att act acg gtt gta ccc cgg ggg ttt 384
 Tyr Tyr Cys Ala Arg Asp Glu Ile Thr Thr Val Val Pro Arg Gly Phe
 115 120 125
 gct tac tgg ggc caa ggg acc ttg gtc acc gtc tcc tca ggt ggc ggt 432
 Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
 130 135 140
 ggc tcg ggc ggt ggt ggg tcg ggt ggc ggc gga tct gag ctc gtg ctc 480
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Leu Val Leu
 145 150 155 160
 acc cag tct cca tcc agt ctg tct gca tcc ctt gga gac aca att acc 528
 Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly Asp Thr Ile Thr
 165 170 175
 atc act tgc cat gcc agt cag aac att aat gtt tgg tta agt tgg tac 576
 Ile Thr Cys His Ala Ser Gln Asn Ile Asn Val Trp Leu Ser Trp Tyr
 180 185 190
 cag cag aaa cca gga aat att cct caa cta ttg atc tat aag gct tcc 624
 Gln Gln Lys Pro Gly Asn Ile Pro Gln Leu Leu Ile Tyr Lys Ala Ser
 195 200 205
 aac ttg cac aca ggc gtc cca tca agg ttt agt ggc cgt gga tct gga 672
 Asn Leu His Thr Gly Val Pro Ser Arg Phe Ser Gly Arg Gly Ser Gly
 210 215 220
 aca ggt ttc aca tta acc atc agc agc ctg cag cct gaa gac att ggc 720
 Thr Gly Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Ile Gly
 225 230 235 240
 act tac tac tgt caa cag ggt caa agt tat cct ctg acg ttc ggt gga 768
 Thr Tyr Tyr Cys Gln Gln Gly Gln Ser Tyr Pro Leu Thr Phe Gly Gly
 245 250 255 260
 ggc acc aag ctg gaa atc aaa cgg gct gat gct gca cca act gta agc 816
 Gly Thr Lys Leu Glu Ile Lys Arg Ala Asp Ala Ala Pro Thr Val Ser
 265 270 275
 gaa aag gac gag ctg taa taa 837
 Glu Lys Asp Glu Leu
 280

<210> 54
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<400> 54

Met Glu His Leu Trp Phe Phe Leu Leu Leu Val Ala Ala Pro Arg Trp
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 Val Leu Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Thr Arg
 20 25 30
 Pro Gly Ala Ser Val Leu Leu Ser Cys Leu Ala Ser Gly Tyr Thr Phe
 35 40 45
 Thr Ser His Trp Met Gln Trp Val Arg Gln Arg Pro Gly Gln Gly Leu
 50 55 60
 Glu Trp Ile Gly Thr Ile Tyr Pro Gly Asp Gly Asp Thr Arg Tyr Thr
 65 70 75 80
 Gln Asn Phe Leu Gly Leu Ala Thr Leu Thr Ala Asp Leu Ser Ser Thr
 85 90 95
 Thr Ala Tyr Leu His Leu Ser Ser Leu Ser Ser Glu Asp Ser Ala Val
 100 105 110
 Tyr Tyr Cys Ala Arg Asp Glu Ile Thr Thr Val Val Pro Arg Gly Phe
 115 120 125
 Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
 130 135 140
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Leu Val Leu
 145 150 155 160
 Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly Asp Thr Ile Thr
 165 170 175
 Ile Thr Cys His Ala Ser Gln Asn Ile Asn Val Trp Leu Ser Trp Tyr
 180 185 190
 Gln Gln Leu Pro Gly Asn Ile Pro Gln Leu Leu Ile Tyr Leu Ala Ser
 195 200 205
 Asn Leu His Thr Gly Val Pro Ser Arg Phe Ser Gly Arg Gly Ser Gly
 210 215 220
 Thr Gly Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Ile Gly
 225 230 235 240

Thr Tyr Tyr Cys Gln Gln Gly Gln Ser Tyr Pro Leu Thr Phe Gly Gly
 245 250 255

Gly Thr Leu Leu Glu Ile Leu Arg Ala Asp Ala Ala Pro Thr Val Ser
 260 265 270

Glu Leu Asp Glu Leu
 275

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Arg Lys Lys Arg
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